PARADOX PCS265V7 LTE Communicator Module Installation Guide

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PARADOX PCS265V7 LTE Communicator Module

Product Information

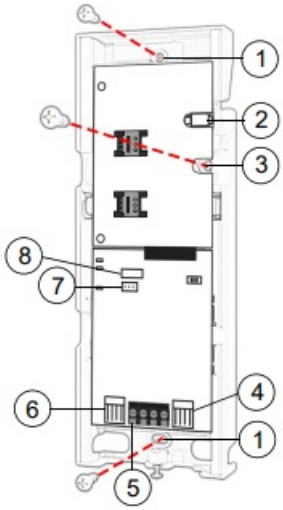
The PCS265V7 is an LTE Communicator Module with a version of V7.0 or higher. It is compatible with BlueEye and SWAN Server. The module supports two nano LTE or GSM provider SIM cards. It has various LED functionalities to indicate power status, signal strength, network connection, and battery charging. The module can be connected to an IP Internet Module's PCS port for additional functionality. Please note that the battery is optional and should not be a backup power source.

Product Usage Instructions

1. **Installation:** Mount the PCS265V7 module using the provided mounting hole. Connect the antenna to the antenna connector and ensure the wall tamper hole is not obstructed. Connect the necessary cables to the serial connector, RS485/power terminal, and upgrade connector. Place the SIM cards in the SIM card tray, with SIM 1 as the primary card and SIM 2 as the backup card if needed. If only one SIM card is used, insert it into SIM 1. Ensure that the cover tamper switch is properly positioned.
2. **SIM Card Connection:** Open the SIM card tray and insert the SIM cards into the base. SIM 1 is used as the primary card, and SIM 2 is used as the backup card. If only one SIM card is used, insert it into SIM 1. Note that the configuration of SIM Card 2 can only be done via SMS.
3. **Panel Connections:** Connect the LTE (Serial Connector) to the panel for communication. If needed, connect an external antenna using the ANTK4G LTE external antenna kit. Additionally, if an IP Internet Module is available, connect it to the PCS265V7 module's PCS port. Refer to the IP module's installation manual for configuration details.
4. **Powering up the PCS265V7:** Once all the hardware connections are completed, the PCS265V7 module will start its power-up sequence. The LED will indicate the network status, and if configured for LTE reporting, network provider information needs to be configured. Please refer to the programming section for more information.
5. **LED Functionality:** The LED on the module has various functionalities to indicate different statuses such as power status, signal strength, network connection, and battery charging. Please refer to the user manual for a detailed explanation of LED indications.
6. **Programming:** To configure the PCS265V7 for reporting, start by configuring the SIM cards. SIM Card 1 can be configured via panel programming or SMS, while SIM Card 2 can only be configured via SMS.

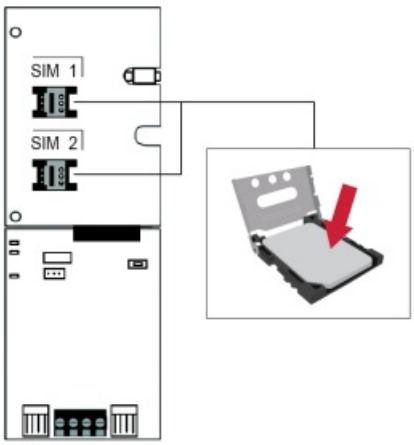
You must use a SIM card with a data charge limit. Paradox will not be responsible in any way for any usage charges of data or voice whatsoever.

Installation



1. Mounting hole
2. Antenna connector
3. Wall tamper hole
4. Serial connector
5. RS485 / power terminal
6. Upgrade connector
7. Battery terminal
8. Cover tamper switch

SIM Card Connection
The PCS265V7 supports two nano LTE or GSM provider SIM cards. To install the SIM cards, open the SIM Card tray and insert the card into the base, as shown. SIM 1 is used as “Primary” and SIM 2 for “Backup”. If only



one SIM card is used, insert into SIM 1.
Note: SIM Card 2 can only be configured via SMS.

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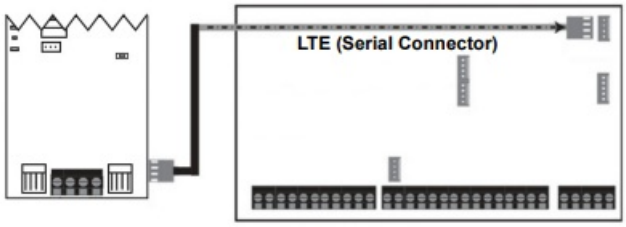
Panel Connections
Connect the PCS265V7’s serial out to the serial connector on the panel.

- For LTE reporting, connect to the Serial port of the panel.



External Antenna Connection
Use the ANTK4G LTE external antenna kit for PTCRB installations or to improve RF reception if your module's signal strength is weak. External antenna kits and extension kits are purchased separately.

IP Module Connection
The PCS265V7 can be connected to an IP Internet Module's PCS port. For more information on how to configure this option, please refer to the IP module's Installation manual.

Powering-up the PCS265V7
Once your hardware connections are completed, the PCS265V7 module will begin its power-up sequence.

- The power LED will turn solid green
- Status LED will turn solid green
- SIM card 1 LED will slowly flash red while searching for the GSM network; once found the LED will be solid yellow

When configured for LTE reporting, you will need to configure network provider information. Refer to the Programming section.
Note: The battery is optional. If a battery is used/installed, do not allow the battery to deplete, and ensure that the battery is replaced when low.

The battery function is to support power shutdown and not to be used as backup as defined in EN50131-6.

LED Functionality

LED	Functionality	
SIM1 and SIM2	Solid yellow	GSM
	Red flashing	No network
	Solid blue	LTE Internet present, polling to SWAN and received a connection identifier
	Flashing Blue	Data exchange
	Flashing green	Updating firmware
	Flashing every 0.2 seconds	Internet present, polling to SWAN but did not receive a connection identifier
	Flashing every 0.5 seconds	Internet present, received a connection identifier but it is not polling to SWAN
	Flashing every 1 second	Internet present, not polling to SWAN and did not receive a connection identifier
	Off	No Internet connection
Power	Solid green	Power on
	Off	No power
Status	Solid green	Battery is charged at 80% or higher
	Flashing green	Battery charging
	Off	The battery is not connected
Signal Strength	Three LEDs indicate network signal strength	

Note: When upgrading the firmware remotely SIM1, SIM2, and Status LEDs will all flash green throughout the upgrade process.

Panel Communication Loss LED Functionality

LED	Functionality	
SIM1	Blue	On for 3 seconds then flashes green 3 times in a loop
SIM 2	Orange	Flashes 3 times every 3 seconds
Power	Solid green	On
Status	Red	Flashes 3 times every 3 seconds
RSSI	COLOR Green	All LEDs are on for 3 seconds then off for 1.5 seconds in a loop

Programming

- To configure the PCS265V7 for reporting, you must first configure your SIM cards. Please note that SIM Card 1 can be configured via panel programming or SMS and SIM Card 2 via SMS only.
- IP Reporting over LTE and SMS Personal Reporting

Network Provider Information

MG/SP	EVO	Feature
[921]	[2960]	APN part 1 (characters 1-16)
[922]	[2961]	APN part 2 (characters 17-32)
[923]	[2962]	APN user name part 1 (1-16)
[924]	[2963]	APN user name part 2 (17-32)
[925]	[2964]	APN password part 1 (1-16)
[926]	[2965]	APN password part 2 (17-32)
Important: This information can be obtained from your mobile network provider.		

Refer to the List of SMS Commands Table on page 2. LTE Reporting Options

MG/SP	EVO	Feature	Details
[918] [919]	[2976] to [2983]	Account / Partition Registration	MG/SP: Sections represent account/ partition 1 and 2 EVO: Sections represent account / partition 1 to 8
[806]	[2975]	[7] Off + [8] Off = landline only [7] Off + [8] On = LTE primary / landline backup (default) [7] On + [8] Off = landline only [7] On + [8] On = landline and LTE in parallel	

Receiver Settings	**MG/SP**		
Receiver #: IP address* IP port ** IP address WAN 2 IP port WAN2 Receiver password Security Profile	1 [929] [930] [931] [932] [933] [934]	2 [936] [937] [938] [939] [940] [941]	Backup [943] [944] [945] [946] [947] [948]
Module registration Press **[ARM]** to register	[935]	[942]	[949]

Receiver Settings	**MG/SP**			
Receiver Settings	**EVO**			
Receiver #: IP address* IP port ** IP address WAN 2 IP port WAN2 Receiver password Security Profile	1 [2984]	2 [2986]	3 [2988]	4 [2990]
Module registration Press **[ARM]** to register	[2985]	[2987]	[2989]	[2991]
* For 1 or 2 digit numbers, add “0’s” before the digit: e.g., 138.002.043.006 ** Default = 10000 Enter [MEM] for blank space				

SMS Messages for Backup

Command	**Description**
P[PASSWORD].SMS[GSM MODEM TELEPHONE #].[IPRS-7 PASSWORD]	Used to program the receiver’s SMS parameters

Additional Programming Options

SMS Language

Language	Value	Language	Value
English (default)	000	Bulgarian	016
French	001	Romanian	017
Spanish	002	Slovak	018
Italian	003	Chinese	019
Swedish	004	Serbian	020
Polish	005	Malay	021
Portuguese	006	Slovenian	022
German	007	Lithuanian	023
Turkish	008	Finnish	024
Hungarian	009	Estonian	025
Czech	010	French Canadian	026
Dutch	011	Belgian	027
Croatian	012	Latvian	028
Greek	013	Albanian	029
Hebrew	014	Macedonian	030
Russian	015		

SMS Programming
Refer to the panel's respective user manual for more information on SMS Personal Reporting.

Section	SMS Site Name Label							
EVO								
[2954]	_/	/ /	/ /	/ /	/ /	/ /	/ /	/ /
MG/SP								
[780]	_/	/ /	/ /	/ /	/ /	/ /	/ /	/ /

List of SMS Commands
Please note that the default password is admin.

Command	Description
P[password].A[IP address].P[port number]	Used for LTE remote access
P[password].IP.[call back phone number]	Used to obtain the IP address and IP port of the PCS265V7
P[password].RESET	Used to power cycle the PCS265V7

P[password].STATUS.[phone number]	Used to obtain the signal strength, signal quality, LTE connection status, and APN settings of the current SIM card
P[password]. APN1.NAME. [Access Point Name]	Used to program the SIM Card 1 APN
P[password]. APN1.USER. [Access Point Name]	Used to program the SIM card 1 APN User Name
P[password]. APN1.PSW. [Access Point Name]	Used to program the SIM card 1 APN Password
P[password]. APN1.CLEAR]	Used to clear the SIM Card 1 APN
P[password]. VAPN1.[CALL BACK PHONE NUMBER]	Used to view the SIM Card 2 Access Point Name information
P[password]. APN2.NAME. [Access Point Name]	Used to program the SIM Card 2 Access Point Name
P[password]. APN2.USER. [Access Point Name]	Used to program the SIM Card 2 Access Point User
P[password]. APN2.PSW. [Access Point Name]	Used to program the SIM Card 2 Access Point Password
P[password]. APN2.CLEAR	Used to clear the SIM Card 2 Access Point Name
P[password]. VAPN2.[CALL BACK PHONE NUMBER]	Used to view the SIM Card 2 Access Point Name information

P[password].[IP1W1/ IP1W2/ IP2W1/ IP2W2/ IP3W1/ IP3W2/ IP4W1/ IP4W2].[domain name]	Set domain name for LTE receiver
P[password].[IP1W1/ IP1W2/ IP2W1/ IP2W2/ IP3W1/ IP3W2/ IP4W1/ IP4W2].CLEAR	Clear domain name for LTE receiver
C[user code].[ARM/OFF].A[area number], [area number], [area number]TO[area number]	Arm/Disarm
P[password].—S	Disable SWAN polling (V7.0 and higher)
P[password].+++S	Enable SWAN polling (V7.0 and higher)

Certification

The following statements apply for EN 50131 and EN 50136 certification:

- The mode of operation is pass-through
- PCS265V7 must be installed and connected to an EN-approved Grade 3 control panel
- Monitoring of the transmission network interface (Internet connection): In case of network/interface failure, the device sends a troubling message to the control panel which then displays it via connected keypad(s)
- Information Security is achieved by 256-bit encrypted, supervised communication (AES validation number 986) which prevents unauthorized reading or modification of messages
- Substitution Security is achieved by Information Security (as stated above), physical security (Tamper protection), and a unique Serial Number from each device. Messages sent to the receiving station include the S/N to identify the substitution and alert accordingly

Technical Specifications

Specifications	Description
RF Power	Class 4 (2W) @ 850/1900 MHz Class 2 (1W) @ 1800/1900 MHz UMTS 850/1900 @ 0.25W (America) UMTS 900/2100 @ 0.25W (Europe)
World Zone Compatibility	All except the U.S.A
Antenna Bandwidth	5 bands, wideband
Voltage Input	12 VDC nominal
Consumption during LTE transmission	60 mA standby 300 mA maximum
Encryption	128-bit (AES)
SMS Protocol	7-bit (GSM: 3GPP TS 23.038/ GSM03.38) or 16-bit (UCS2 ISO/IEC10646)
SIM Cards	LTE
Humidity	0 – 90% non-condensing
Operating Temperature	-20 – 50 °C (-4 to 122 °F)
Dimensions	20.8 x 7.5 x 2 cm / 8.2 x 2.9 x 0.8 in.
Certifications	EN 50136-1 EN 50136-2 Grade 3 Class II EN 50131-10 ATS Category SP5 Certification Body: Applica Test and Certification

Safety Note: This device may operate continuously in a temperature of 55°C (131°F) for a maximum period of 7 days.

Warranty

The Limited Warranty Statement can be found on the website www.paradox.com/terms.
Patents

Your use of the Paradox product signifies your acceptance of these terms and conditions. The following US patents may apply 5,886,632 and 6,215,399. Other Canadian and international patents may apply.

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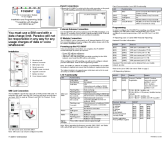
Documents / Resources

	PARADOX PCS265V7 LTE Communicator Module [pdf] Installation Guide PCS265V7 LTE Communicator Module, PCS265V7, LTE Communicator Module, Communicator Module

References

- Paradox - Headquarters
- Paradox - Headquarters
- User Manual